

## FIELD TRIPS OF THE CLUB

### TRIP OF SUNDAY, OCTOBER 6, TO THE NORTH EDGE OF THE PINE BARRENS

With a cold fall rain making the day bleak, only four of the hardiest field hikers appeared at the Tinton Falls Inn for the pine barren trip. The Tinton Falls immediately back of the mill wash over an iron stone cliff about twelve feet high and on this exposed escarpment on the south side we found the Ebony Spleenwort and *Woodsia obtusa*, growing most luxuriantly. Immediately below were *Boltonia* and a species of *Coreopsis* both flowering freely despite hard frost the previous night which had killed jewelweed, bracken and most of the tenderer plants.

We proceeded down Pine Brook to a typical wooded area in the middle zone of New Jersey where other species of aster, goldenrod, large patches of closed gentian, feathery stalks of *Selaginella* and the last lingering blooms of *Coreopsis mariana* made bright patches of color. Here again the ferns were the principal attractions since both Mr. Fessenden and Mr. Jehlyn are fern fans. The Marsh fern, New York fern, Cinnamon fern and Crested Shield fern all abounded on the edge of the marsh. Both the Crested Shield fern and *Woodsia obtusa* being surprises for an area so near the pine barren conditions.

Along the foot of the wooded bluffs in better drained ground were all of the Intermediate forms of *Botrichium* ranging from the blunt leaved coarse type to the finely dissected form which is known as the species *dissectum*. A few of the plants were so vigorous as to carry two fruiting fronds instead of one. Fruits of both the jack-in-the-pulpit and the skunkcabbage were abundant. Trailing arbutus, holly and the mountain laurel all were particularly vigorous and healthy in the red sandy soil of the lower slopes. The forest growth was principally of red, black and chesnut oak, hemlocks and white pine with occasional white oaks, red maples and gum trees.

The evergreen shield fern, christmas fern and hayscented fern clothe the upper slopes in dense woodlands. The growth in this area in all respects is typical of that of the middle and northern part of New Jersey; the only species common in the Pine Barrens being in the open fields where *Andropogon*, *Lespedeza capitata* and sweet fern made low brush thickets.

After luncheon we proceeded southward and within three miles came to typical pine barren with *Ionoctis linearifolia*, *Aster spectabilis*, and *Solidago odora*, the most conspicuous flowers. In little sandy pockets of boggy ground the sphagnum was dotted with sundew, cranberry and the dried fruit stalks of *Utricularia*,—*Lycopodium Chapmanii* with its creeping stalk and upright straw colored fruiting branches making diminutive sentinels in these tiny patches of bog. On the higher ground pitch pine, scrub oak, black and post oak competed for the scanty nourishment in the white sand, the underbrush consisting almost entirely of sweet fern and sheep laurel with dried fronds of the eagle fern filling almost every open spot.

Then a trip of five miles westward brought us through an old cedar swamp with sweet bay, climbing azalea, *Pieris* and high bush huckleberry thickets to a particularly heavy tangle with sphagnum, pitch pine, cranberries and one large patch of the locally abundant climbing fern, *Lygodium palmatum*, as the principal attraction. This particular station for the climbing fern was reported by Rev. Samuel Lockwood about seventy years ago, relocated by the undersigned about thirty years ago and then left to its own devices until this fall. Meantime the size of the stand has apparently decreased due to encroachment of heavy thickets of maple and tall shrubs on what was originally low bushes and sphagnum bogs. Miss Wyckoff reported that a friend of hers has found the same species of climbing fern at still another station further east near Asbury Avenue, south of Scobyville. This would be a good place to search out in another trip as in that same general neighborhood the southern mistletoe has been gathered within the past generation and is probably still there, possibly constituting the most northern station still extant of this plant. Heavier showers of rain coming about three o'clock after we had gazed our fill on the climbing fern dampened our ardor for any further exploring that day.

FORMAN T. MCLEAN

#### FIELD TRIP OF OCTOBER 13

Twenty members and friends made the trip to the Delaware Water Gap. Colonies of three uncommon ferns were visited, the rusty woodsia (*Woodsia ilvensis*), mountain spleenwort

(*Asplenium montanum*), and hairy lip-fern (*Cheilanthes lanosa*). The region also proved a rich one for lichens.

S. FRED WRIGHT

#### FIELD TRIP OF OCTOBER 27

A warm day welcomed the group of six members and guests who made the trip to the Pine Barren region near Lakewood, N.J.

The painted landscape seemed to grow more intense in color as we progressed southward in the train. The red and brown of oaks and the yellow, orange and crimson of red maples were set off by the background of the ubiquitous pitch pines. Around New York City the climax of autumnal coloration had already passed but here it still presented a lovely warmth of color.

Our itinerary took us to Lake Carasaljo. We followed the shore of the lake along the south shore and then the stream which empties into it, later returning on the opposite side. A swamp to the right of the railroad was our first hunting ground. Many buttonball bushes were easily spotted by their rounded fruits, *Mikania scandens*, the climbing hempweed, overflowed the shrubs and herbs alike in clouds of feathery seeds. A stream disclosed abundant fruit of the pickerel weed, each containing many gelatinous coated seeds able to remain afloat all winter.

At the bottom of the railroad embankment the leader searched for the brilliant blue of the bottle gentian, *Gentiana Andrewsii*, which he had found while scouting the previous Sunday. Most of the petals had turned brown, but a few still showed color. Specimens of *Pycnanthemum virginianum*, a very strong scented mint, were bruised, as were also the leaves of *P. flexuosum*, both of which were eagerly sniffed by those present.

Along the shores of the lake we found the red berries of *Ilex verticillata*, and the shining red hips of the swamp rose, *Rosa caroliniata*. Several fine plants of the water loosestrife, *Decodon verticillata*, bearing excellent seed pods were also discovered.

Few flowers were still blooming, among them being *Aster spectabilis*, *A. ericoides*, *Bidens bipinnata*, *Saponaria ocymoides*, *Lepidium virginicum*, *Taraxacum officinale*, *Chrysopsis mariana* and the dying remnants of various goldenrods.—*Solidago odora*, *rugosa* and perhaps *ulmifolia*.

*Solidago odora* was very common. The anise-like odor is very pleasant and I understand colonial housewives often made a palatable tea from the dried leaves. I brought some of the leaves home, made the experiment and found that it had a delicate pleasant flavor.

*Betula nigra*, the river birch, was fairly common at the head of the lake. Its pink tinted, fuzzy bark and unevenly serrate leaves are sure identifications. Noticeable also was the deep green of the sweet bay, *Magnolia virginiana*, which forms extensive colonies wherever the ground is sufficiently damp. During a mild winter the leaves do not fall off.

We noticed a few colonies of sensitive fern not yet touched by the frost. Among them many fertile fronds of the chain fern attracted attention. The recent spell of dry weather did not allow the development of mushrooms, only two being seen, *Laccaria laccata*, and a species of *Entoloma*, also a few clumps of *Indian pipe*. We found many specimens of willow oak, *Quercus phellos*, and some Spanish oak, *Q. falcata*. *Quercus ilicifolia* and *marilandica* accompanied *Pinus rigida* wherever the typical Pine Barren stretches prevailed. A few American chesnuts were making their persistent and perennial attempts, to grow to their ancient glory.

A real surprise not connected with botany was seeing a woman leading on separate chains a silver fox and western coyote. The glistening grayish black pelt of the fox with the tip of the tail pure white formed an unusual picture. The coyote was almost as large as a police dog and nearly the same color. he was more amenable to our friendly demonstrations than the fox who still showed some of his woodland reticence.

The party encountered several flocks of Myrtle warblers, quite drab in appearance, except for the telltale yellow rumps. Chickadees and juncos kept us company all the way.

GEORGE F. DILLMANN

#### FIELD TRIP OF NOVEMBER 17

The rain of the metropolitan area on November 17 consisted entirely of snow and sleet in the Suffern to Ramapo country; as a result the ground was completely covered with snow and ice, and the study of liverworts and mosses was impossible.

Though the weather made it seem somewhat anomalous, it

was decided to substitute a search for signs of spring. The preceding period of more than two weeks of unseasonably high temperature had given rise to frequent reports in the newspapers of the flowering of fruit trees especially; though this is not at all an unusual phenomenon, it was emphasized by the opening of the buds of *Forsythia*, *Ginkgo*, and *Acer* within and close to the city.

A study of the buds of our native plants, for comparison with the cultivated genera mentioned above, was made. The outer bud scales of the Shag-bark Hickory, *Carya ovata*, were dropping in certain cases; those of the Cherry Birch, *Betula lenta*, had elongated, so that the green portions of the scales were exposed for a considerable distance between the brown parts; and the buds of the Gooseberry, *Ribes oxycanthoides*, also seemed unusually far along. Aside from this meager evidence, the obvious conclusion was that the overwhelming majority of the plants examined gave no indication of precocious development. One might expect, perhaps, flower buds of Spice Bush, Flowering Dogwood, or the aments of the Alder to show some effect of the warm weather; but the results were negative in each case. Red Maple, *Viburnum*, Mountain Laurel, Tulip Tree, Oaks, and numerous other genera were examined; all of them were in the normal winter condition. The great majority of the woody plants between Suffern and Ramapo certainly showed no appreciable effect of the "warm spell."

EDWIN B. MATZKE